AMENDMENTS TO THE SPECIFICATION

Please replace the 6th (sixth) full paragraph on page 1 with the following amended paragraph:

- the method including implementing packet or cell forwarding rules at end user equipments and at a multicast router to enable the separation of unidirectional downstream, and bi-directional or unidirectional upstream flows.

Please replace the 2nd (second) full paragraph on page 8 with the following amended paragraph:

Initially, the end user needs to discover what multicasting services are available to it through the multicast packet routing device. There are many different ways that this information can be ~~convey~~ conveyed to the end user application. The method of discovery does not materially affect the following information flow.

Please replace the 4th (fourth) full paragraph on page 8 with the following amended paragraph:

From the end user's perspective, this can be considered to be "join in progress": the root content source may have been streaming the multicast flow into the network for a considerable period of time beforehand, but for all ~~intensive~~ intents and purposes, the newly attached end user

is not concerned with the packets which have been sent in the past. The newly attached user starts to receive the packets that the root content source has recently been streaming.

Please replace the paragraph bridging pages 10 and 11 with the following amended paragraph:

At the IP layer, the multicast information packets are normally transported in the same channel that carries the multicast control packets. The method disclosed in this invention uses specially defined packet forwarding rules at the end user modem and at the IP multicast router to ~~allows~~ allow the information and control flows to be separated, conveyed over the appropriate type of ATM connection.

Please replace the 1st (first) full paragraph on page 12 with the following amended paragraph:

When the final end user chooses to ~~volunteer disconnection~~ voluntarily disconnect from the multicast IP flow, the IP multicast packet routing device may, at its discretion, stop streaming the IP multicast information packets towards that end user's access node. If an end user again requests receipt of that multicast information flow and the IP multicast packet routing device had previously ceased sending information packets towards the subscriber access node, it will first

need to recommence its transmission of the multicast information flow and then direct the subscriber access node to join the requesting subscriber to the new multicast tree.

Please replace the 2nd (second) full paragraph on page 12 with the following amended paragraph:

In many cases, the IP multicast packet routing device will support more than one interface towards possibly more than one subscriber access node as shown in Figure 6. The arrangement in ~~Fugure~~ Figure 6 includes IP multicast router, 601, and ATM based subscriber access nodes, 602. In this case, a separate shared point to multipoint connection must be provisioned on each of the subscriber access node interfaces and the multicasting router will need to duplicate separate instances of the multicast information packets and forward these into each of the point to multipoint connections.

Please replace the paragraph bridging pages 12 and 13 with the following amended paragraph:

Each possible multicast stream is transported on a dedicated point to multipoint connection. However, a separate and dedicated point to multipoint information connection needs to be provided between the IP multicast packet routing device and ~~the~~ each subscriber access node.

Please replace the 1st (first) full paragraph on page 13 with the following amended paragraph:

As shown in Fig 7, "p" IP multicast streams from the IP multicast packet routing device, 701, are available for each subscriber via the ATM based subscriber access node, 702. Each of these "p" streams is carried over an ATM ~~point-to-mutipoint~~ point-to-multipoint connection. The end user can select one of the "p" multicast streams.

Please replace the 2nd (second) full paragraph on page 13 with the following amended paragraph:

In yet another embodiment of the invention, the IP multicast packet routing device could be implemented within a non-IP based access node as shown in Figure 8. A specific example of such an embodiment could be a subscriber access node, 801, which uses ATM as the internal communication mechanism but includes a plug-in IP multicast packet routing device, 802, which performs a similar function to that of an external IP multicast packet routing device. A subscriber access node connection manager, 807, controls the ATM based multicast in cooperation with ~~thew~~ the subscriber IP multicast control link.